

Nez Perce - Clearwater National Forest Biological Assessment/Evaluation

Summary of Effects

For Threatened and Sensitive Plant Species

Project Name: Klondike Group Exploration

The Biological Evaluation process (FSM 2672.43) is intended to conduct and document activities necessary to ensure proposed management actions will not jeopardize the continued existence or cause adverse modification of habitat for species that are listed or proposed to be listed as Endangered or Threatened by the U.S. Fish and Wildlife Service and species listed as Sensitive by the U.S. Forest Service, Region 1. Direction in FSM 2670.5 states, “Biological Evaluation, A documented Forest Service review of Forest Service programs or activities in sufficient detail to determine how an action or proposed action may affect any threatened, endangered, proposed or sensitive species.”

Threatened and endangered species included in this analysis are consistent with the current U.S. Fish and Wildlife Service species list. The only federally listed species known or suspected to occur on the Forest are Spalding’s catchfly (*Silene spaldingii*) and MacFarlane’s four-o’clock (*Mirabilis macfarlanei*); both limited to parts of the Salmon River basin and water howellia (*Howellia aquatilis*), which is limited to the lower Palouse River basin. Whitebark pine (*Pinus albicaulis*) is a candidate for federal listing and is also addressed.

This biological evaluation is also prepared to determine the project’s effects on forty one sensitive plant species that occur or are expected to occur on the Nez Perce - Clearwater National Forest. The determinations are summarized in the table below. Rational for determinations are provided following the table.

Species Determinations

Plant Species	Cat.*	Species Presence	Habitat Presence	Species Potentially Affected?	Habitat Potentially Affected?	Determination**
Water howellia <i>Howellia aquatilis</i>	T	No	No	No	No	NE
MacFarlane's four-o'clock <i>Mirabilis macfarlanei</i>	T	No	No	No	No	NE
Spalding's catchfly	T	No	No	No	No	NE

Plant Species	Cat.*	Species Presence	Habitat Presence	Species Potentially Affected?	Habitat Potentially Affected?	Determination**
<i>Silene Spaldingii</i>						
Whitebark pine <i>Pinus albicaulis</i>	C	No	No	No	No	NE
Maidenhair spleenwort <i>Asplenium trichomanes</i>	S	No	No	No	No	NI
Payson's milkvetch <i>Astragalus paysonii</i>	S	No	No	No	No	NI
Deerfern <i>Blechnum spicant</i>	S	No	No	No	No	NI
Crenulate moonwort <i>Botrychium crenulatum</i>	S	No	Yes	Yes	Yes	MI
Lance-leaf moonwort <i>Botrychium lanceolatum</i> var. <i>lanceolatum</i>	S	No	Yes	Yes	Yes	MI
Slender moonwort <i>Botrychium lineare</i>	S	No	No	No	No	NI
Mingan moonwort <i>Botrychium minganense</i>	S	No	Yes	Yes	Yes	MI
Mountain moonwort <i>Botrychium montanum</i>	S	No	Yes	Yes	Yes	MI
Northern moonwort <i>Botrychium pinnatum</i>	S	No	Yes	Yes	Yes	MI
Least moonwort <i>Botrychium simplex</i>	S	No	Yes	Yes	Yes	MI
Bug-on-a-stick <i>Buxbaumia aphylla</i>	S	No	No	No	No	NI
Green bug-on-a-stick <i>Buxbaumia viridis</i>	S	No	Yes	Yes	Yes	MI
Broadfruit mariposa <i>Calochortus nitidus</i>	S	No	No	No	No	NI
Contance's bittercress <i>Cardamine constancei</i>	S	No	No	No	No	NI
Buxbaum's sedge <i>Carex buxbaumii</i>	S	No	No	No	No	NI
Bristle-stalked sedge <i>Carex leptalea</i>	S	No	No	No	No	NI
Many headed sedge	S	No	No	No	No	NI

Plant Species	Cat.*	Species Presence	Habitat Presence	Species Potentially Affected?	Habitat Potentially Affected?	Determination**
<i>Carex sychnocephala</i>						
Anderegg's cladonia <i>Cladonia andereggii</i>	S	No	No	No	No	NI
Pacific dogwood <i>Cornus nuttallii</i>	S	No	No	No	No	NI
Clustered lady's slipper <i>Cypripedium fasciculatum</i>	S	No	No	No	No	NI
Dasynotus <i>Dasynotus daubenmirei</i>	S	No	No	No	No	NI
Idaho douglasia <i>Douglasia idahoensis</i>	S	No	No	No	No	NI
Giant helleborine <i>Epipactis gigantea</i>	S	No	No	No	No	NI
Puzzling halimolobos <i>Halimolobos perplexa</i> var. <i>perplexa</i>	S	No	No	No	No	NI
Sticky goldenweed <i>Haplopappus hirtus</i> var. <i>sonchifolius</i>	S	No	No	No	No	NI
Light hookeria <i>Hookeria lucens</i>	S	No	No	No	No	NI
Salmon-flowered desert-parsley <i>Lomatium salmoniflorum</i>	S	No	No	No	No	NI
Chickweed monkeyflower <i>Mimulus alsinoides</i>	S	No	No	No	No	NI
Spacious monkeyflower <i>Mimulus ampliatus</i>	S	No	No	No	No	NI
Thin sepal monkeyflower <i>Mimulus hymenophyllus</i>	S	No	No	No	No	NI
Gold-back fern <i>Pentagramma triangularis</i> var. <i>triangularis</i>	S	No	No	No	No	NI
Sweet coltsfoot <i>Petasites frigidus</i> var. <i>palmaris</i>	S	No	No	No	No	NI
Whitebark pine <i>Pinus albicaulis</i>	S	No	No	No	No	NI
Licorice fern <i>Polypodium glycyrrhiza</i>	S	No	No	No	No	NI

Plant Species	Cat.*	Species Presence	Habitat Presence	Species Potentially Affected?	Habitat Potentially Affected?	Determination**
Naked-stem rhizomnium <i>Rhizomnium nudum</i>	S	No	Yes	Yes	Yes	MI
Mendocino sphagnum <i>Sphagnum mendocinum</i>	S	No	No	No	No	NI
Evergreen kittentail <i>Synthyris platycarpa</i>	S	No	Yes	Yes	Yes	MI
Sierra wood-fern <i>Thelypteris nevadensis</i>	S	No	No	No	No	NI
Short-style sticky tofieldia <i>Triantha occidentalis</i> ssp. <i>brevistyla</i>	S	No	No	No	No	NI
Douglas clover <i>Trifolium douglasii</i>	S	No	No	No	No	NI
Plumed clover <i>Trifolium plumosum</i> var. <i>amplifolium</i>	S	No	No	No	No	NI
Idaho barren strawberry <i>Waldsteinia idahoensis</i>	S	No	No	No	No	NI

***Category:** **T** = Threatened; **E** = Endangered; **P** = Proposed; **C** = Candidate; **S** = Sensitive

****Federally listed (Threatened) Species Determination:** **NE** = No Effect; **BE** = Beneficial Effect; **NL** = Not likely to adversely affect; **LT** = Likely to adversely affect. **Sensitive Species Determination:** **NI** = No Impact; **BI** = Beneficial Impact; **MI** = May impact individuals or habitat but not likely to cause trend toward federal listing or reduce viability for the population or species; **LI** = Likely to impact individuals or habitat with the consequence that the action may contribute towards federal listing or result in reduced viability for the population or species.

Determinations Rational

Botanists have reviewed this project, used available information on species distributions and habitat (using one or more of the following: topo maps, aerial photos, field reconnaissance, previous surveys, habitat modeling), and then assessed the potential for impacts for all federal listed and Region 1 sensitive species. If the project was determined to have **no effect** or **no impact**, this determination was based on one or more of these criteria:

- habitat for the species is not present in the project area.
- habitat for the species is present but the species does not occur in this area.

- habitat for the species is present, the species occurs or may occur in the project area, but the project would not have any direct, indirect or cumulative effects on this species.

There are no known occurrences of TES plant species in the project area. There is suitable habitat for nine sensitive plant species. Most of these are moonworts, which often can grow together in genus communities. Mangan moonwort is known to occur at a few locations in the basin away from the project area. There is also potential habitat for some rare moss species. While close surveys have not occurred, the suitable habitat is abundant throughout this portion of the forest. Evergreen kittentail occurs in habitat that is general in the area to be disturbed, but no close by occurrences are known. This endemic species has several large populations in such habitat elsewhere on the forest. This species also generally does well with ground disturbance.

While suitable habitat for some sensitive plant species occurs in the project area, this potential habitat occurs throughout the general area and elsewhere on the forest to ensure viability of the species in question. Avoiding moist ground will also mitigate potential effects at the site.

The proposed activities of this project would have no effects or impacts that would lead to any extraordinary circumstances for any TES plant species.

BOTANIST /s/ Michael Hays

DATE February 21, 2018